Telesystems≣

New Freedom in Connectivity

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Imagine your data network present anywhere instantly

▪▪▪ connectivity as an intelligent force.

As demands shift; needs evolve

▪▪▪ communication channels reshape to fit new forms.

Today, we have new freedom in connectivity

▪▪▪ ARLAN, a wireless, transparent

communications network.

POWERFUL NEW SOLUTION

Telesystems provides a powerful new solution to speed the implementation of local area, computer networking …

WIRELESS CONNECTIVITY

Telesystems is the world leader in wireless networks for the workplace. The product is ARLAN … the most Advanced Radio LAN in the world, utilizing Spread Spectrum Technology. For the computer communications manager, ARLAN offers a cost effective alternative to fixed, cable-based data networks, offering unlimited flexibility and improved security.

GROWTH IN COMPUTER NETWORKS

… has led to an ever-increasing need for cabling. Contrasting the speed and flexibility of data access on local area networks (LAN's), the planning and manual labour of cable installation is a slow, inflexible process.

SST: SPREAD SPECTRUM TECHNOLOGY

Instead of using conventional radio, Telesystems is the first to develop a cost effective, wireless connectivity solution. Originally invented over 40 years ago for military communications, SST is used to avoid detection and jamming by the enemy. The result is ARLAN … ultra secure, high immunity to interference, wideband data transmission and no user radio licence required in the U.S.A. Other countries are expected to follow the U.S. lead.

EXPAND YOUR HORIZON

… and see what total networking flexibility can do for your organization. The ARLAN system gives any terminal or PC complete mobility within a radius of hundreds of feet in closed offices or several miles in an open area. ARLAN provides transparent communications to replace wiring or to complement an existing cable plant for relocation, expansion or reliability requirements. Each workstation has a uniquely addressed network access unit; a wireless connection that links to the host system or file server.

ACCELERATE COMMUNICATIONS

The ARLAN wireless system provides all the speed and capacity your network is likely to need. The ''MicroCellular Architecture'' allows endless expansion by giving users, within each cell access to a high speed, wireless channel. Data rates per cell, start at 200,000 bits per second.

CUT COST / IMPROVE PERFORMANCE

The high cost of cabling, hundreds of dollars each time a computing device moves, is projected to go higher as labour rates increase. A wireless ARLAN network removes the cost of installation from future network planning, resource allocation and personnel assignments. The result is an information system better equipped to serve your needs and to respond to new business opportunities.

REINFORCE RELIABILITY & SECURITY

The unique ARLAN SST technology allows you to improve your system reliability and data security. Developed by the military for covert communications, the SST signal is more resistant to eavesdropping than the RF ''noise'' emitted by standard cables. ARLAN data encryption provides billions of code options, uniquely programmable per customer, per link or per session. Data packet transmission ensures error-free delivery. ARLAN provides you with media diversity and keeps you operational even if the cable is cut.

ARLAN WIRELESS NETWORKS

… provide wireless connectivity for users within a single building or throughout a multi-site campus. Multiple ARLAN cells provide capacity expansion, and zones provide extended coverage.

ARLAN: SYSTEM OPTIONS

Two different ARLAN architectures are available: a point to multi-point, virtual circuit network such as the ARLAN 100; or, a peer-to-peer ''connectionless'' network, typical of PC LAN's such as the ARLAN 400. These are typical of the ARLAN capabilities offered with various standard computer system interfaces.

TRANSPARENT, COMPATIBLE STANDARD

Development of the patented ARLAN SST continues to expand the family of products providing transparent, wireless connectivity for an increasing number of mainframe and PC networking environments. ARLAN wireless networks are being implemented for factory, office, hospital, process control, retail, security and educational applications.

THE FUTURE OF CONNECTIVITY

ARLAN SST technology, implemented by Telesystems, makes wireless connectivity a practical reality; it has the power to reshape organizations. With ARLAN, corporate work groups can respond rapidly to emerging needs. Information resources can be allocated and distributed more economically. Capacity for innovation increases; response to competitive challenges quickens.

EASIER, FASTER, BETTER

Wherever people and processes are linked by data, Telesystems is proving that connectivity is easier, faster and better with ARLAN.

INSIDE WIRELESS CONNECTIVITY

Telesystems uses a unique combination of data packet switching for efficient networking, cellular radio concepts for capacity expansion, powerful encryption to assure privacy, and patented SST for superior radio transmission.
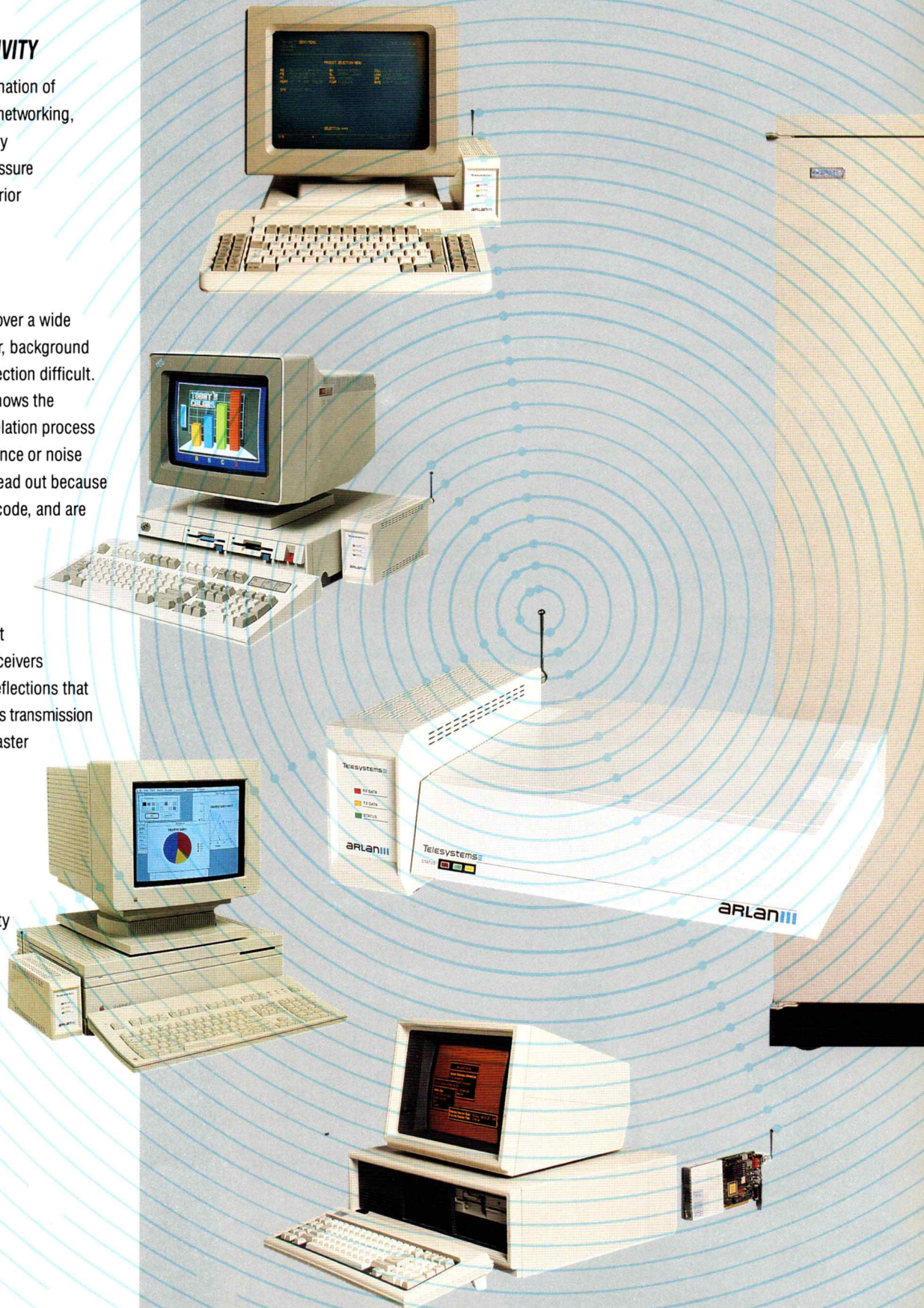
SECURITY & RELIABILITY

In SST, the information is spread over a wide spectrum to appear like low power, background noise, thus making unwanted detection difficult. The intended receiver, however, knows the spreading code and the SST correlation process rebuilds the information. Interference or noise inputs to the SST receiver get spread out because they do not match the spreading code, and are filtered out.

ᴅEBAND DATA

These SST properties also combat reflections. While conventional receivers are easily corrupted by multiple reflections that occur within buildings, SST provides transmission data speed orders of magnitude faster than conventional radio.

NO FCC RADIO LICENCE

The result is ARLAN ... the most Advanced Radio LAN in the world ... ultra secure, with high immunity to interference. ARLAN is certified by the U.S. Federal Communications Commission (FCC), authorizing use without the need of radio licence.

TECHNOLOGY LEADER

In 1985 the FCC authorized use of SST radio without a user licence in the U.S.A. By 1987, Telesystems submitted ARLAN for FCC certification and was active in advising other national agencies on the benefits of SST.

FCC CERTIFICATION

Telesystems is the first to get FCC certification for an SST device. Product shipments started in early 1988 to domestic and international markets. The customers are major corporations, government agencies and dynamic users requiring flexibility or mobility.

WIRELESS LAN EXPERTS

Telesystems has a highly qualified team of computer LAN and radio specialists, ensuring the highest level of technical, application and market support. The staff have extensive development capabilities to produce functional, reliable products along with the field experience to respond effectively to user needs.

QUALITY MANUFACTURE

… uses high volume, automated surface mount techniques and custom integrated circuits. Manufacturing facilities are located in U.S.A. and Canada.

ORIGIN OF TELESYSTEMS

In 1981 the Telesystems founders combined unique talents to meet customer needs for a better way to handle growth in data networking.

THE FOUNDERS

… started with market research and parallel feasibility design to fulfill user needs. They have successfully managed the company since its inception:

Wence Zenko has over 20 years of experience in launching new products and new ventures for several leading high technology companies in marketing, engineering, and as general manager.

Lucy Sheer has extensive, international marketing, sales, executive and business management experience with the world's leading computer and telecommunications organizations, and with new ventures.

Steve Messenger has experience in product planning, computer networking and signal processing in high speed LAN's, which served as the basis for the key Telesystems patents in wireless networking.

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